



UNITED STATES PATENT AND TRADEMARK OFFICE

HCT
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,213	09/21/2000	Melissa I. Dopps	WEYC116173	9095

26389 7590 01/15/2003

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

EXAMINER

STEPHENS, JACQUELINE F

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/666,213

Applicant(s)

DOPPS ET AL.

Examiner

Jacqueline F Stephens

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35,38 and 41-55 is/are pending in the application.
- 4a) Of the above claim(s) 49-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35,38 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 30-33, and 35 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for providing a fibrous band with matrix fibers, does not reasonably provide enablement for the matrix fibers to be cellulose and cellulose pulp while the fibrous band is also substantially free of absorbent material, particularly in the claimed range of 10-85% by weight of the total composite. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 30-33 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 30-33 claim a fibrous band comprising a fiber matrix having cellulose fibers. Claims 30-33 are dependent on claim 1, which claims a fibrous band that is substantially free of absorbent material. It is unclear how the fibrous band can comprise cellulose fibers, which are well known in the art to be

absorbent material, and be substantially free of absorbent material. For the purposes of examination, the claims will be interpreted as the absorbent material refers to the superabsorbent material as described in page 12, lines 16-27 of the specification. If the applicant intends absorbent material to be defined in this manner, the examiner suggests clarifying independent claim 1 to recite, "substantially free of superabsorbent material".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5, 11, 12, 15-18, 38, 41, and 45-47 are rejected under 35

U.S.C. 102(b) as being anticipated by Kenmochi et al. USPN 5613962.

As to claims 1, 38, 41, and 45-47, Kenmochi discloses an absorbent article, such as a feminine care product and diaper (col. 1, lines 5-8), comprising:

a liquid pervious facing sheet 2,

a storage layer 4/5 comprising an absorbent composite comprising one or more fibrous bands ²⁰8 in a fibrous base 4. The base comprises a fibrous matrix and absorbent material (col. 2, lines 53-55). The bands are substantially free of absorbent material (col. 2, lines 55-62),

and a liquid impervious backing sheet 3 joined to the topsheet (Figure 1).

As to claims 2 and 3, the bands are continuous and substantially parallel along the composite's length in the machine direction (Figure 1).

As to claims 5, 11, and 12, the fibrous matrix comprises fibers selected from the group of claimed materials (col. 3, lines 3-15).

As to claims 15-18, Kenmochi discloses the absorbent material is a superabsorbent particle present in an amount of about 5-40%, which includes the claimed ranges (col. 3, lines 4-10).

7. Claims 1, 4-9, 11-13, 20, 24-35, 38, 41, and 45-47, as best understood by the examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Ahr USPN 5733273.

As to claims 1, 38, 41, and 45-47, Ahr discloses an absorbent article, such as a feminine care product or diaper (Abstract), comprising:

a liquid pervious facing sheet,

a storage layer (10, 310, 410, 510, Figures 1-5) comprising an absorbent composite comprising one or more fibrous bands (12, 312, 412(A-D), 512) in a fibrous base (14, 314, 414, 514). The base comprises a fibrous matrix and absorbent material (col. 4-, lines 18-34). The bands are substantially free of absorbent material (col. 4, line 42 through col. 5, line 16) in that the bands of Ahr have some superabsorbent material, but at 33% superabsorbent by weight of the band, are primarily free of superabsorbent material (*In re Bliss Co. V. Cold Metal Process Co.* (DC Nohio) 122 USPQ 238);

and a liquid impervious backing sheet joined to the topsheet (Figure 1, col. 8, lines 40-43).

As to claim 4, the fibrous bands of Ahr are discontinuous along the composites length in the machine direction (Figures 1-5).

As to claims 5-9, 11, and 12, the fibrous matrix comprises fibers selected from the group of claimed materials (col. 4, lines 18-34). Ahr incorporates by reference Herron USPN 5183707 (Abstract and col. 4, lines 63-66), which discloses crosslinked cellulose fibers for use in the matrix fibers.

As to claim 20, the composite comprises a wet strength agent (col. 4, lines 34-41).

As to claims 24 and 25, Ahr discloses the density and basis weights within the claimed ranges (col. 2, lines 51 through col. 3, line 3).

As to claims 26-33, Ahr discloses the fibrous bands comprise fibers selected from the group of claimed materials (col. 4, lines 34-64 and Herron '707 col. 4, lines 35-66).

As to claims 13, 34 and 35, Ahr discloses the absorbent strips can comprise up to 50% of the total weight of the composite (col. 9, lines 58-60), less the amount of superabsorbent in the strips (33%, col. 5, lines 13-16), the fibrous material (matrix or resilient) in the absorbent strips can comprise up to 16.5% of the total weight of the composite, and 50% or more of the base.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi. Kenmochi discloses the present invention substantially as claimed. However, Kenmochi fails to disclose the matrix fibers are present in the base in an amount from about 10-50% by weight of the total composite. Kenmochi discloses the matrix fibers are present in the base in an amount from about 60% of the base (col. 3, lines 5-10, reverse of amount of polymer particles). Although Kenmochi does not give the claimed percentage of matrix fibers, the applicant fails to disclose that the 50% is such a critical value or gives unexpected results so to exclude a 60%. In the absence of

any new or unexpected results, discovering the optimum or workable ranges involves only routine skill in the art.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr in view of Watanabe et al. USPN 4480000. Ahr discloses the present invention substantially as claimed. However, Ahr fails to disclose the polyester fibers are polyethylene terephthalate fibers. Watanabe discloses an absorbent article comprising a polyester web having polyethylene terephthalate fibers for the benefits of enhanced rate of fluid absorption and providing a feeling of dryness after such absorption (col. 2, line 52 through col. 3, line 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the fibrous matrix of Ahr to include polyethylene terephthalate fibers for the benefits disclosed in Watanabe.

11. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr in view of Chan EP 0515750.

As to claim 21, Ahr discloses the present invention substantially as claimed. However, Ahr does not disclose the wet strength agent is selected from polyamide-epichlorohydrin or polyacrylamide resins. Chan discloses a polyamide-epichlorohydrin wet strength resin for use in providing paper with resistance to rupture or disintegration. Chan discloses the polyamide-epichlorohydrin wet strength resin comprises reduced amount of organic-chlorine contaminants yet retains its wet strength properties. Additionally Chan discloses the polyamide-epichlorohydrin wet strength resin does not

increase the stiffness of the absorbent medium or reduce its water absorbency as compared to other types of resins (page 2, lines 1-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the wet strength resin of Ahr with the polyamide-epichlorohydrin wet strength resin for the benefits disclosed in Chan.

As to claim 22, Ahr/Chan disclose the wet strength resin can be added to an absorbent medium in an amount of 0.1-2% by weight of the absorbent medium ('750 page 6, lines 49-58).

As to claim 23, Ahr/Chan does not specifically disclose a wet strength agent present in the composite in about 0.25% by weight of the total composite. However, Chan recognizes the percentage can be varied and this will affect the wet strength of the absorbent medium. Chan, therefore recognizes the wet strength is a result effective variable of percentage of wet strength agent added to the absorbent medium. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of Ahr/Chan with the claimed 0.25% add-on of wet strength agent, since discovering an optimum value of a result effective variable involves only routine skill in the art.

12. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi in view of DiPalma et al USPN 5649916.

As to claim 42, Kenmochi discloses the present invention substantially as claimed. However, Kenmochi fails to disclose the absorbent article comprises an

Art Unit: 3761

acquisition layer. DiPalma discloses an absorbent article comprising an acquisition layer 18 for the benefit of acquiring and rapidly transferring liquid in the z-direction (towards the core) ('916 col. 4, lines 44-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Kenmochi to include an acquisition layer for the benefits disclosed in DiPalma.

As to claims 43 and 44, Kenmochi discloses the present invention substantially as claimed. However, Kenmochi fails to disclose the absorbent article comprises an intermediate layer interposed between the acquisition layer and the storage layer. DiPalma discloses an absorbent article comprising an intermediate layer 20 interposed between the acquisition layer 18 and the storage layer 24 for the benefit of rapidly wicking fluids and providing increased resiliency ('916 col. 5, line 59 through col. 6, line 26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Kenmochi to include an intermediate layer interposed between the acquisition layer and the storage layer for the benefits disclosed in DiPalma.

13. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi in view of Karami USPN 457989. Kenmochi discloses the present invention substantially as claimed. However, Kenmochi fails to disclose the absorbent article comprises leg gathers. Karami discloses an absorbent article comprising leg gathers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Karami to include leg gathers. Doing so would

Art Unit: 3761

provide prevention of diaper leakage and discomfort, which Karami teaches is desired (Figure 1 and col. 1, lines 45-68).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F Stephens whose telephone number is (703) 308-8320. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703)308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Jacqueline F Stephens
Examiner
Art Unit 3761

January 10, 2003


WEILUN LO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700